MODULATORS OF SHP2 TYROSINE PHOSPHATASE AND THEIR USE IN THE TREATMENT OF BODY WEIGHT DISORDERS

Abstract of the Disclosure

Described are methods and compositions for regulating body weight and/or regulating the rate of weight gain or loss, and particularly, for treating or preventing obesity. Specifically, methods of administering varying levels of Shp2 modulators to an animal, alone or in combination with body weight regulating agents are disclosed. Methods and compositions for treating a variety of disorders associated with or caused by undesirable body weight are also described. Also described are methods for identifying compounds useful for regulation of body weight and associated conditions. In particular, methods are disclosed for identification of compounds that preferentially modulate binding of Shp2 to leptin receptors. Also described is a genetically modified non-human animal model for studying the peripheral and central pathways of energy homeostasis. Also disclosed are methods of identifying compounds for regulating such pathways.